

BEFORE THE  
POSTAL RATE COMMISSION  
WASHINGTON, D.C. 20268-0001

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POSTAL RATE COMMISSION  
OFFICE OF THE SECRETARY

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97-1

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS BRADLEY  
TO INTERROGATORIES OF NEWSPAPER ASSOCIATION OF AMERICA  
(NAA/USPS-T14-16-18)

The United States Postal Service hereby provides responses of witness  
Bradley to the following interrogatories of Newspaper Association of America:  
NAA/USPS-T14-16-18, filed on August 20, 1997.

Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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Chief Counsel, Ratemaking

  
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September 3, 1997

Response of United States Postal Service Witness Bradley  
to  
Interrogatories of NAA

NAA/USPS-T14-16. Please refer to your direct testimony at page 90, lines 24-28.

- a. Please confirm that the variabilities for activities at non-MODS offices are not calculated directly in any of your analyses.
- b. Please confirm that the variability for non-MODS offices is assumed to equal the average or system variability for the MODS offices.
- c. Do non-MODS offices tend to be smaller mail processing facilities compared to MODS offices? Please provide the average size of the non-MODS offices and the MODS offices in terms of mail volumes processed.
- d. Did you perform any econometric analyses with the size of the facility as an independent variable? If no, please explain why not. If yes, please provide copies of these analyses.

NAA/USPS-T14-16 Response:

- a. If the term "directly" implies that the variabilities are not estimated using piece handling volumes from non-MODS offices, then I confirm. Piece-handlings are currently not collected for activities in non-MODS offices.
- b. Confirmed.
- c. It is my understanding that the non-MODS offices are smaller, on average, than the MODS offices but that there is considerable overlap between the smaller MODS offices and the larger non-MODS offices. As I said in my testimony at page 90,

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there is currently no system that measures piece handlings at non-MODS offices.

I thus cannot provide comparisons of the volumes of mail processed.

- d. Yes. As you know, my analysis is performed at the level of the mail processing activity. To the extent the size of a facility is measured by volume in the activity, then the size of the facility is included as a right-hand-side variable. Furthermore, to the extent there is some other measure of facility size that is relevant, its effect would be captured by the facility-specific variables in the panel data analysis. As I suggest on page 40 of my testimony:

Now,  $\alpha_i$  represents a vector of facility-specific effects that cause hours to vary across sites for the same amount of TPH. My experience in studying mail processing activities strongly suggests that there are significant non-volume variations across facilities. The ages and sizes of facilities vary widely across the postal network; some facilities are in urban areas others are not. In fact, in previous work I found that non-volume variations in facility characteristics have an important impact on productivity. (footnote omitted.)

Copies of these analyses have been provided in my workpapers WP-1 through WP-5.

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NAA/USPS-T14-17. Please refer to the direct testimony of Postal Service Witness Moden (USPS-T-4) at page 22, lines 17-20, where he states:

"In smaller facilities not covered by MODS, sorting schemes are often simpler, the workroom floor is smaller, clerks have greater personal knowledge of the local delivery area, and their very size makes it easier to keep a steady flow of mail to operations such as manual letters and flats."

- a. Is the steady flow of mail to operations such as manual flats and letters likely to result in higher productivity for these activities at non-MODS offices compared to the productivity of these activities at MODS office? If no please explain why not.
- b. Please refer to your direct testimony at page 58, lines 14-17. Please explain fully how a steady flow of mail to manual letter and flat operations would affect the variabilities of these operations.

NAA/USPS-T14-17 Response:

To clarify my answer, I think it would be helpful to complete the paragraph in witness

Moden's testimony on page 22, lines 20-23 where he states:

Nonetheless, the equipment and mailflows are similar to those at facilities reporting to MODS, and the factors accounting for volume variability would thus be much the same regardless of facility size.

- a. It is difficult to draw such broad comparisons for two reasons. First, there is a wide range of average productivities within MODS offices, so I would assume that there

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would also be a wide range of average productivities in non-MODS offices. Second, there are a variety of factors, such as the quality of the mail, the negotiated local labor agreement, variations in physical plant and operating schedules, that could cause average productivities to vary between non-MODS and MODS offices. I do think, however, that an increase in mail volume at a non-MODS office that generated a more steady flow than before would be likely to increase average productivity.

- b. Without additional data, I cannot quantify witness Moden's observation about the steady flow of mail to manual operations. Intuitively, it would seem like a smooth steady flow would allow a tighter matching of hours to volume, which implies a higher variability than would otherwise occur at non-MODS offices. This is not to imply that variabilities at non-MODS offices are higher or lower than at MODS offices.

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NAA/USPS-T14-18. Please refer to the direct testimony of Postal Service Witness Moden (USPS-T-4) at page 20, lines 23-30 and page 21, lines 1-5.

- a. Do you agree that there is likely to be adjustment period when automated equipment is installed at a facility that delays achievement of optimal productivity? If no, please explain the basis for your disagreement.
- b. If such an adjustment period exists, do you agree that productivity during this adjustment period would be lower than the productivity achieved after the adjustment period? If no, please explain the basis for your disagreement.
- c. Was any attempt made in your analysis to exclude data during the adjustment period of a facility? If yes, please explain what data were excluded and on what basis the exclusion was made. If no, please explain why not.
- d. Was any attempt made in your analysis to segregate the effects of lower productivities during the adjustment period or to otherwise account for the effect of the learning curve on variabilities? If yes, please explain how you analysis accounted for these effects. If no, please explain.

NAA/USPS-T14-18 Response:

- a. Yes.
- b. No. Please keep in mind that the optimal productivity in an operation may not be the highest possible productivity in that operation. For example, productivity in the MLOCR operation could be increased by running only the cleanest mail through the machines. This might not be optimal, however, because it implies sorting more mail in lower-productivity manual operations. A below-maximum productivity on the MLOCR may still be above the manual sorting productivity. When a new machine

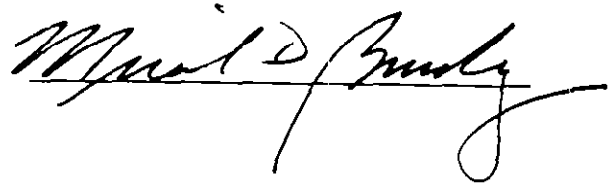
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is put into place, it may be that only clean mail is run over it at first. As time passes, dirtier mail may might be fed into the machine, causing the productivity to fall.

- c. Yes. Each activity was subject to a threshold scrub. Data were excluded for an operation until the size of that operation (as measured by piece handlings) was large enough to indicate that the activity was in the normal operating range. I obtained these thresholds from operations experts and for the automated activities, the threshold was set at 100,000 piece-handlings per accounting period.
- d. Yes, as explained in my answer to part c., above a threshold scrub was used to control for the initial startup of an activity. In addition, any "learning-curve" type effects were captured in two ways. First, a time trend was included in the econometric model. As discussed in my testimony, this time trend captures, *inter alia*, the effect of adjustments in the use of an automated operation through time. Second, the manual ratio is included in the econometric equations for the letter and flat operations. As mail is diverted from manual operations to automated operations, this manual ratio will fall. It is thus a measure of the changing use of automated operations and controls for possible learning curves as well as changes in mail quality.

# DECLARATION

I, Michael D. Bradley, declare under penalty of perjury that the foregoing answers are true and correct, to the best of my knowledge, information, and belief.

A handwritten signature in cursive script, reading "Michael D. Bradley", written over a horizontal line.

Dated: Sept. 3, 1997



### CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.

  
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